

REMARKS

This application is amended in a manner believed to place it in condition for allowance.

Claims 19, 20, 23, 28, 33, 37, 51-61, 63, and 67-70 are amended. Support for the amended claims may be found, for example, at page 7, lines 20-30, page 8, lines 19-21, page 9, lines 5-10 and page 11, lines 7-33.

Claims 1-18, 29-32, 64 and 65 are cancelled.

Claims 19-28, 33-63 and 66-75 remain pending in the application.

The Official Action rejects claims 55, 60, 64, 65, 67, and 68 under 35 USC 112, second paragraph, as allegedly being indefinite. This rejection is respectfully traversed.

Claims 55 and 60 are amended and believed to be definite. Claims 64 and 65 are cancelled. No reasons are given for rejecting claims 67 and 68.

Therefore, withdrawal of this rejection is respectfully requested.

Claims 19, 20, 23, 25 and 27 are rejected under 35 USC 102(a) and (e) as allegedly being anticipated by MODAK et al. US 2003/0152644 ("MODAK"). This rejection is respectfully traversed.

MODAK is offered for teaching disinfecting the surface of a leather patch with a composition containing 1-(2-ethylhexyl) glycerol ether.

However, the actual focus of MODAK is skin disinfectants, and the leather patch treated with the disinfectant is for evaluation purposes (in paragraph 52). In the evaluation, the patch is not disinfected at a temperature equal to or greater than 40°C, as currently recited in independent claim 19. As MODAK does not disclose every feature of claim 19, MODAK cannot anticipate claim 19 and dependent claims 20, 23, 25 and 27.

Therefore, withdrawal of the rejection is respectfully requested.

Claims 19-23, 25-27, 42, 44, 46, 48, 57, 58 and 62-66 are rejected under 35 USC 102(a) and (e) as allegedly being anticipated by SAUD et al. US 2004/0001797 ("SAUD"). This rejection is respectfully traversed.

SAUD is offered for teaching a method of disinfecting a hard surface employing a composition containing 1-(2-ethylhexyl)glycerol ether in amount of 0.5%, which is intended to be dispensed as a spray or wiped on a surface, including kitchen and bathroom surfaces, for a contact time of at least 30 seconds. The Official Action offers Example 3 of Table 1 for teaching a specific composition with 1-(2-ethylhexyl) glycerol ether.

However, SAUD does not disclose the recited method.

SAUD discloses a myriad of surfaces for disinfection. The contact time of at least 30 seconds is in reference to skin treatment, i.e., topically applied (paragraph 61), and the composition of Example 3 appears to be tested for "solution and wipe". SAUD does not specifically disclose disinfecting an inanimate surface at a temperature equal to or greater than 40°C as recited in independent claim 19, for 10 seconds to 1 hour as recited in claim 48. Thus, SAUD cannot anticipate independent claim 19 and dependent claims 20-23, 25-27, 42, 44, 46, 48, 57, 58, 62-63 and 66.

Therefore, withdrawal of the rejection is respectfully requested.

Claims 21, 22, 24, 26 and 42 are rejected under 35 USC 103(a) as allegedly being unpatentable over MODAK. This rejection is respectfully traversed.

As discussed above, MODAK discloses skin disinfectants, and MODAK fails to disclose or suggest the recited method of independent claim 19. Thus, MODAK alone cannot render obvious dependent claims 21, 22, 24, 26 and 42.

Therefore, withdrawal of the rejection is respectfully requested.

Claims 24, 28, 43, 45, 47, 51-56, and 59-61 are rejected under 35 USC 103(a) as allegedly being unpatentable over SAUD. This rejection is respectfully traversed.

As discussed above, SAUD does not disclose the claimed invention, nor does SAUD suggest disinfecting an inanimate surface at a specific temperature equal to or greater than 40°C as recited by the claimed invention. Accordingly, SAUD alone cannot render obvious dependent claims 24, 28, 43, 45, 47, 51-56, and 59-61.

Claims 29-41, 49 and 50 are rejected under 35 USC 103(a) as allegedly being unpatentable over SAUD in view of TU et al. WO 92/09309 ("TU"). This rejection is respectfully traversed.

Claims 29-32 are cancelled. However, claim 19 now recites the features of claim 32, i.e., disinfecting at a temperature equal to or greater than 40°C.

SAUD is offered for the reasons discussed previously. The Official action recognizes that SAUD discloses treatment at ambient temperatures.

TU is offered for the general teaching "percent kill can usually be increased just by increasing the temperature of the solution and/or sterilization time", as well as the specific treatment of a hard surface with a glycidyl ether composition at a treatment temperature between ambient temperature to 100°C.

However, the composition of the claimed method achieves more than a simple percent kill increase with the increase in temperature or time. The claimed composition was discovered unexpectedly to have an exceptionally steep temperature gradient

of the microbicidal effect (See, e.g., page 7, lines, 20-30). Accordingly, disinfection may be conducted for a time such as 1 to 30 minutes or 5 to 15 minutes at a temperature equal to or greater than 40°C, as recited in claims 33-41 and 49 and 50.

TU, however, requires contacting a surface for 5 to 120 hours at a temperature between ambient temperature to 100°C (e.g., at page 7, lines 21-30, page 8, lines 11-16, the claims and Figures 1 and 2). Thus, one of ordinary skill in the art would have been discouraged from selecting 1 to 30 minutes or 5 to 15 minutes for temperatures equal to or above 40°C, as TU suggests this would not be effective.

At best, the proposed combination of SAUD and TU teaches 5 to 120 hours at ambient to 100°C, and the combination fails to render obvious the claims against which it was applied.

Therefore, withdrawal of this rejection is respectfully rejected.

Claims 67 and 68 are rejected under 35 USC 103(a) as allegedly being unpatentable over LANGFORD US 5,906,802 ("LANGFORD") in view of WALDMANN-LAUE et al. US 5,539,001 ("WALDMANN-LAUE"). This rejection is respectfully traversed.

LANGFORD is offered for teaching sterilizing a medical instrument by cleaning, disinfecting with a sterilant, rinsing with sterile water, and drying. The Official Action recognizes that LANGFORD fails to disclose the use of an alkyl glycerol ether as the sterilant.

WALDMANN-LAUE is offered for teaching disinfecting hard surfaces with an aromatic alcohol and a glycerol ether having a C₆₋₂₂ alkoxymethyl group. The position of the Official Action is that because WALDMANN-LAUE is effective at low-temperatures, it would have been an obvious choice for the sterilization process of LANGFORD.

However, WALDMANN-LAUE does not disclose the claimed alkyl glycerol ether of independent claim 67: 1-(2-ethylhexyl) glycerol ether. Rather, WALDMANN-LAUE discloses the diol formula II: R₂-CHOH-(CHR₃)_x-CH₂OH. In order to even approach the claimed 1-(2-ethylhexyl) glycerol ether, x must be equal to 0, providing a 1,2 diol, and WALDMANN-LAUE, at best, suggests a C₆₋₂₂ alkoxymethyl for R₂ when x=0 (column 1, lines 48-57). WALDMANN-LAUE fails to suggest an ethylhexyl group for alkyl group of the "alkoxymethyl". Accordingly, WALDMANN-LAUE fails to disclose or suggest the claimed glycerol ether structure, and the proposed combination fails to teach the claimed invention, and cannot render obvious claims 67 and 68.

Therefore, withdrawal of this rejection is respectfully requested.

Claims 69-75 are rejected under 35 USC 103(a) as allegedly being unpatentable over LANGFORD in view of WALDMANN-LAUE et al., further in view of TU. This rejection is respectfully traversed.

LANGFORD and WALDMANN-LAUE are offered for the reasons stated above.

TU is offered for the general teaching "percent kill can usually be increased just by increasing the temperature of the solution and/or sterilization time", as well as the specific treatment of a hard surface with a glycidyl ether composition at a treatment temperature between ambient temperature to 100°C.

However, the composition of the claimed method achieves more than a simple percent kill increase with the increase in temperature or time. The claimed composition was discovered unexpectedly to have an exceptionally steep temperature gradient of the microbicidal effect (See, e.g., page 7, lines, 20-30). As a result, the disinfection time is 1 minute to about 20 minutes as recited in claim 75, at the temperatures recited in claims 71-73.

TU fails to disclose or suggest such a disinfection time. TU requires contacting a surface for 5 to 120 hours at a temperature between ambient temperature to 100°C (e.g., at page 7, lines 21-30, page 8, lines 11-16, the claims and Figures 1 and 2). Thus, one of ordinary skill in the art would have been discouraged from selecting a time such as is 1 minute to about 20 minutes, as recited in claim 75, for any of the claimed temperatures of 71-73, as TU requires contact for at least 5 hours at these temperatures.

TU also fails to disclose or suggest the claimed 1-(2-ethylhexyl) glycerol ether as recited in claim 68, the recited drying and cleaning temperatures recited in claims 69, 70 and 74.

Thus, at best, the proposed combination teaches disinfecting a 1,2 diol composition for 5 to 120 hours at ambient to 100°C, and the proposed combination fails to render obvious independent claim 67-75.

Therefore, withdrawal of this rejection is respectfully requested.

Claims 19, 20, 23 and 28 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as allegedly being unpatentable over claims 31-33 of Application No. 10/445,715. This rejection is respectfully traversed.

Application No. 10/445,715 does not claim a particular temperature for disinfecting an inanimate surface, and, thus, alone, Application No. 10/445,715 cannot render obvious the claimed invention.

Therefore, withdrawal of this rejection is respectfully requested.

Claims 67-75 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as allegedly being unpatentable over claims 73-81 of Application No. 10/825,412.

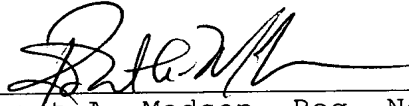
A terminal disclaimer will be filed with respect to Application No. 10/825,412, once allowable subject matter is indicated.

In view of the forgoing remarks, applicants believe that the present application is in condition for allowance at the time of the next Official Action. Allowance and passage to issue on that basis is respectfully requested.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

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